

VIII. ATTACHMENT & EXHIBITS

ATTACHMENTS:

	<u>Directly Relevant Documents</u>
Attachment 1	SP-391-000-25 - R0
Attachment 2	SP-391-000-65 - R1
Attachment 3	SP-391-001-52 - R0
Attachment 4	SP-391-001-51 - R0
Attachment 5	MIL-PRF-13830B
Attachment 6	DS-391-000-36 - R0
Attachment 7	SC-700-866-47 - R16
Attachment 8	Fed-STD-595B
Attachment 9	I-720-0A29Z-001 - R023
Attachment 10	I-720-0A24E-001 - R002
Attachment 13	Addendum 1

	<u>Documents provided for reference to a future project only</u>
Attachment 11	SP-391-000-24 - R0
Attachment 12	SP-391-000-64 - R0
Attachment 14	Addendum 3

EXHIBITS:

Exhibit A	Instructions to Prospective Proposers SLARFP (01/08)
Exhibit B	SLAC Proposal Form
Exhibit C	SLAC Terms & Conditions M367 (Rev. 09Jan09) & M364 (Rev. 09Jan09)
Exhibit D	Representations & Certifications
Exhibit E	Pre-Work Hazard Analysis Form
Exhibit F	Sample Certificate of Liability Insurance
Exhibit G	Sample of a Small Business Subcontracting Plan

The Seller or Joint Venture shall provide warranties on all factory items such as motors and offer warranty options for all fabricated mechanical parts. See warranty terms and conditions referenced in Documents M364 (Rev. 09Jan09) and M367 (Rev.09Jan09)

7. Documentation

The Seller or Joint Venture shall provide two (2) copies of Operations-Maintenance manuals for the complete K-B system.

Refer to the following applicable documents for additional information and requirements:

	<u>Directly Relevant Documents</u>
Attachment 1	SP-391-000-25 - R0
Attachment 2	SP-391-000-65 - R1
Attachment 3	SP-391-001-52 - R0
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III. INSTRUCTIONS TO OFFERORS

Proposals are to be submitted in two (2) Volumes. Volume 1 shall contain the Price Proposal and Other Documents. Volume 2 shall contain the Technical and Management Proposal. One original and three (3) copies of Volume 1 are required. One original and seven (7) copies of Volume 2 are required.

Proposers deviating from the proposal format described in **Section V** below may be disqualified at the sole discretion of SLAC.

SLAC reserves the right to accept or reject any or all proposals prepared in response to this RFP and to waive any informality in any proposal. Minor deviations may be considered, provided the proposal fully meets the objectives of the RFP.

Note: Please see **Exhibit A** – “Instructions to Prospective Proposers” for additional instructions as required.

A. SLAC CONTACTS

The SLAC Purchasing Department is managing the competitive process for this RFP. All contact during the competitive process is to be through the SLAC-Purchasing Department only.

Offerors shall not consult with any other SLAC employee during the evaluation process, other than the SLAC Buyer/Contract Administrator indicated below: Attempts by Offeror to contact other SLAC employees regarding this RFP may result in disqualification of offer.

All questions regarding these specifications, terms and conditions are to be submitted in writing, preferably via e-mail to:

Carol Lam
Sr. Contract Administrator
Stanford National Accelerator Center, MS 18
Purchasing Department
2575 Sand Hill Road, Menlo Park, CA 94025
Phone: (650) 926-5051
Fax: (650) 926-8785
E-mail: clam@slac.stanford.edu

All questions need to be received by February 6, 2009.

B. CALENDAR OF EVENTS (Subject to change)

Event	Date
RFP Issued	January 20, 2009
Formal Proposal due	March 24, 2009
Proposal Evaluation	Duration two (2) weeks after receipt of proposals from March 24, 2009 to April 7, 2009.
Contract Award(s)	Within Two (2) weeks after Proposal Evaluation.

CXI milestone schedule

The following dates below represent absolute drop-dead dates before which a given activity must be completed. Earlier completion of the activities or the project are strongly encouraged.

Activity description	Start	Finish
AWARD: Long Lead CXI KB 1 System		5/6/2009
Vendor Effort - Long Lead CXI KB 1 System -Mechanics		9/10/2010
Vendor Effort - Long Lead CXI KB 1 System- Mirrors		9/10/2010
PDR - Vendor Design Review CXI KB 1 System		9/4/2009
Ship test coupons to SLAC		9/4/2009
Ship test substrate to mechanical vendor		9/4/2009
FDR - Vendor Design Review CXI KB 1 System		12/10/2009
REQD: Seismic Review Complete - CXI KB 1 System		11/23/2009
RCV: Long Lead CXI KB 1 Sys - Mechanics		9/10/2010
RCV: Long Lead CXI KB 1 Sys - Mirrors		9/10/2010
SLAC Effort - Metrology CXI KB 1 System	9/13/2010	11/5/2010
SLAC Effort - Coating Prep CXI KB 1 System	5/24/2010	8/13/2010
SLAC Effort - Coating CXI KB 1 System	9/13/2010	10/22/2010
AVAIL: Ready For Installation CXI KB 1 System		11/8/2010
Assemble, test and install by Vendor on-site CXI KB 1 System	11/8/2010	11/30/2010
Option Item - 0.1 Micron KB System IAW Addendum 3	8/1/2009	8/1/2011

C. SUBMITTAL OF BIDS

All offers shall be received at the SLAC Purchasing Office between the hours of 8:00 a.m. and 4:00 p.m. PDT on **March 24, 2009**. Offers will not be accepted after 4:00 p.m. PDT on the day of submission.

MAIL TO:

**SLAC National Accelerator Center, MS 18
Purchasing Department
2575 Sand Hill Road, Menlo Park, CA 94025
ATTN: Carol Lam**

SOLICITATION NO. 2526

NOTICE TO MAIL ROOM: DO NOT OPEN. THIS IS A PROPOSAL UNDER THE ABOVE IDENTIFIED SOLICITATION.

Exhibit B – Addendum 3

PROPOSAL FORM

Coherent X-Ray Imaging (CXI) 1 micron Kirkpatrick-Baez (KB) System

From: _____
(Company Name)

Address _____

RFP No. : 2526

*Inquiries should be directed to:
Carol Lam
Phone (650) 926-5051
Fax (650) 926-8785*

To: Mr. Barry S. Miller
Director of Acquisition Management
Stanford Linear Accelerator Center
2575 Sand Hill Road, MS#01
Menlo Park, CA 94025

In compliance with your Request for Proposal (RFP) for the above number and date, the undersigned hereby proposes to perform the services described in the RFP, in strict conformance with the Subcontract, except as otherwise noted in the Proposal, for and in consideration of the amount set forth below:

DESCRIPTION - Coherent X-Ray Imaging (CXI) 1 micron Kirkpatrick-Baez (KB) System	PROPOSED % OF THE UNIT PRICE	Unit Price (US\$)
1. Mirror substrates		\$
Preliminary Design and submission of drawings	10%	
Material	10%	
Fabrication of component fabrication	15%	
Delivery of test coupons and blank substrate	10%	
Successful verification of test coupons with SLAC independent metrology	10%	
Completion of all vendor tests	10%	
Delivery of two (2) finished mirror substrates to SLAC	15%	
Successful verification of mirror substrates with SLAC independent metrology	20%	

2. Mirror mechanical support system		\$
Preliminary Design Review and submission of drawings	10%	
Material	10%	
Fabrication of component fabrication	15%	
Delivery of major materials and components	40%	
Completion of all vendor tests	10%	
Delivery /Installation/Acceptance with Documentation at SLAC	15%	

3. Vacuum enclosure		\$
Preliminary Design Review and submission of drawings	10%	
Material	10%	
Fabrication of component fabrication	15%	
Delivery of major materials and components	40%	
Completion of all vendor tests	10%	
Delivery /Installation/Acceptance with Documentation at SLAC	15%	

4. Support stand		\$
Preliminary Design Review and submission of drawings	10%	
Material	10%	
Fabrication of component fabrication	15%	
Delivery of major materials and components	40%	
Completion of all vendor tests	10%	
Delivery /Installation/Acceptance with Documentation at SLAC	15%	

5. 45 Degree Option		\$
Preliminary Design Review and submission of drawings	10%	
Material	10%	
Fabrication of component fabrication	15%	
Delivery of major materials and components	40%	
Completion of all vendor tests	10%	
Delivery /Installation/Acceptance with Documentation at SLAC	15%	

6. Option Item - 0.1 Micron KB System IAW Addendum 3		\$
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Coherent X-Ray Imaging (CXI) 1 micron Kirkpatrick-Baez (KB) System

TOTAL PRICE (US\$) _____

TOTAL PRICE IN WORD: _____

OPTION ITEM:

TOTAL PRICE (US\$) _____

TOTAL PRICE IN WORD: _____

Payment Terms: A prompt payment discount of ____ % will be allowed for payment of invoices paid within ____ days, net ____ days (e.g., 1 %-10 Days, Net 30).

(Net 30 days will be used if a discount or other payment terms are not specified.)

The undersigned agrees that the proposal shall be valid for a minimum of 90 calendar days after the requested proposal due date.

The offeror acknowledges receipt of the following addenda to the drawings, specifications or other documents included in the Request for Proposals: (List Addendum Number and Date for each):

Name of Proposer Address City, State and Zip Code Phone: Fax: Email:	Proposal Date:	
	Authorized Signature:	
	Signer's Printed Name & Title:	

Attachment 14

The LUSI project requests an option to be provided in response to the SLAC Request for Proposal #2526 for the CXI 1 micron KB System. The option, to be acted upon by SLAC at any time within 6 months of the receipt of the proposals by SLAC shall include the following:

A second complete copy of the mechanical system described in Section 9 of SLAC document SP-391-000-65 R1. This second complete system represents the CXI 0.1 micron KB System which is mentioned in Section 10.5 of SLAC document SP-391-000-65 R1. The second system shall be identical except for the following modifications which will allow a 100 nm focus to be produced.

- The vacuum enclosure (described in Section 9.2 of SLAC document SP-391-000-65 R1) shall be 600 mm longer at the downstream end.
- The support stand (described in Section 9.3 of SLAC document SP-391-000-65 R1) shall be 600 mm longer at the downstream end.

The vendor shall also provide 2 mirrors as described in Section 7 of SLAC document SP-391-000-65 R1 with a different figure to produce a focus of roughly 100 nm x 100 nm. The specifications of these two mirrors are identical to those described in Section 7 of SLAC document SP-391-000-65 R1, except for the different figure needed to achieve the desired focal spot size. The figure errors and roughness of these mirrors are the same as those of the 1 micron KB System. Only the focal length and, therefore the figure, are different. The parameters of these 2 mirrors are found in the table below. Highlighted in red are the values which are different from the 1 micron KB mirrors.

	Parameter	Value	Value	Units	Comment
		Mirror 1	Mirror 2		
1	Mirror Shape	Tangential ellipse			
2	Clear aperture length	350		mm	
3	Clear aperture width	$30 \geq \text{width} \geq 12$		mm	
4	Mirror Length	$375 \geq \text{length} \geq 360$		mm	
5	Mirror Width	$60 \geq \text{width} \geq 45$		mm	
6	Mirror Thickness	>50		mm	
7	Substrate material	Si <100>			
8	Figure height error	<1.00		nm rms	Over dimensions from 1mm to the clear aperture size from best-fit ellipse
9	Mid-spatial roughness	<0.25		nm rms	Over the 10^{-3} to $0.5 \mu\text{m}^{-1}$ frequency range
10	High-spatial roughness	<0.25		nm rms	Over the 0.5 to $50 \mu\text{m}^{-1}$ frequency range
11	Tangential Slope error	<0.25		μrad rms	Over dimensions from 1mm to the clear aperture size from best-fit ellipse
12	Sagittal Slope error	<2		μrad rms	Over dimensions from 1mm to the clear aperture width from best-fit sagittal radius
13	Sagittal radius of curvature	>400		m	
14	Focal length	0.9	0.5	m	
15	Maximum incidence angle	3.4		mrad	
16	Average incidence angle	3.067	2.786	mrad	
17	Distance from source	420		m	
18	Vacuum pressure	< 10^{-9}		Torr	